APHIS – Plant Protection and Quarantine
Daily Situation Report: Light Brown Apple Moth (LBAM)
April 24, 2007

Survey and Diagnostics Information:

Counties	Survey		Diagnostics		
	Number of Traps	Number of Positive Traps	Presumptive Positive	Confirmed Positive	
				Today	Total
Alameda	1,224	79	0	18	100
Contra Costa	1,686	39	0	2	46
Fresno	400	0	0	0	0
Imperial	149	0	0	0	0
Kern	294	0	0	0	0
Kings	123	0	0	0	0
Los Angeles	745	0	0	0	0
Marin	699	8	0	0	8
Monterey	303	3	0	1	3
Napa	165	0	0	0	0
Orange	599	0	0	0	0
Riverside	455	0	0	0	0
Sacramento	234	0	0	0	0
San Bernardino	183	0	0	0	0
San Diego	473	0	0	0	0
San Francisco	124	15	0	0	51
San Joaquin	62	0	0	0	0
San Luis Obispo	21	0	0	0	0
San Mateo	666	1	0	0	1
Santa Barbara	215	0	0	0	0
Santa Clara	877	3	0	1	3
Santa Cruz	349	115	0	307	399
Solano	418	0	0	0	0
Sonoma	195	0	0	0	0
Sutter	40	0	0	0	0
Tulare	100	0	0	0	0
Ventura	227	0	0	0	0
Yolo	59	0	0	0	0
Yuba	12	0	0	0	0
Total	11,097	263	0	329	611

- **Survey**
  - Survey teams continue to implement a rigorous detection and delimiting survey for the light brown apple moth (LBAM), *Epiphyas postvittana,* in 29 counties.

- 11,097 pheromone baited traps have been deployed to date. Traps are placed in and around retail and production nurseries, at ports of entry, and in the open environment and are being inspected bi-weekly.

- Visual inspections of all nurseries located within 1.5 miles from any traps with confirmed LBAM are conducted for the presence of live stages.

- **Identification and Diagnostics**
  - Trapped moths are forwarded to the California Department of Agriculture's (CDFA) Plant Pest Diagnostics Laboratory for the initial identification. All LBAM "presumptive positive" moths from each county are forwarded to the ARS Systematic Entomology Laboratory (SEL) in Washington, DC, for confirmation. In counties where previous specimens have been confirmed by SEL, subsequent captures are identified by CDFA.

  - A total of 611 moths have been confirmed to date as LBAM. Most of the captures (98%), however, are from traps located in two specific geographical areas. The first area, which represents approximately 32% of the all LBAM captures, includes the contiguous northwest Alameda, western Contra Costa, southeastern Marin, and northern San Francisco counties. The second area, representing 65% of the captures, is confined to a small section of southern Santa Cruz County. The remainder (2%) came from single trap captures in Monterey, San Mateo, and Santa Clara counties.

Operational Update:

- **Technical Working Group (TWG)**
  - APHIS has assembled a team of subject matter experts from the United States, Australia, and New Zealand to provide recommendations on survey methods, mitigation tools, and eradication strategies.

- **Incident Command**
  - Thirty-six (36) personnel are on-site (32-CDFA/Counties; 4-APHIS) and assuming various roles within the ICS structure.

- **Regulatory Actions**
  - CDFA has established a LBAM quarantine of at least 182 square miles in Alameda, Contra Costa, San Francisco, Marin and Santa Clara counties. The regulations prohibit the movement of all nursery stock and host fruits and vegetables from the quarantine region unless it is certified as free from the pest by an agricultural official.

  - APHIS has developed a LBAM Federal Order requiring inspection and certification of all nursery stock and host commodities from the quarantine areas in California. The Federal Order is scheduled to be finalized before April 27, 2007.

- To date, CDFA has issued a total of 51 compliance agreements to establishments (nursery stock and green waste) located within the quarantine area requiring regular inspections of all nursery stock and report of suspect LBAM to regulatory officers.

- **Trace-back and Trace-forward**
  - Trace-back and trace-forward investigations to determine the source and potential distribution of LBAM continue, including the inspection of nursery establishments.

- **Treatment**
  - To date, host plants in one retail nursery in San Francisco and two production nurseries in Santa Cruz County have been treated with Chlorpyrifos to eliminate LBAM larvae and pupae recovered during trace-back and regular inspections. Post treatment inspections indicate no signs of additional LBAM.

  - CDFA and APHIS are in the process of developing LBAM eradication strategies using mating disruption and other control measures.

Trade Update:

- APHIS informed trading partners of the LBAM finds in California. Additional reports were provided to Canada and Mexico in response to their requests for additional information.

Communication and Outreach:

- Public Information Officers (PIO) and officials from CDFA, APHIS, and Counties continue to field questions from the press and the public regarding the LBAM finds and the regulatory framework.

Background:

- On February 6, 2007, a private citizen near Berkeley in Alameda County, California, reported that two suspect moths had been captured in a blacklight trap on his property.

- In response, pheromone-baited traps were placed on March 1, 2007, in Alameda and Contra Costa counties. Trap inspections began March 7, 2007.

- On March 16, 2007, the ARS Systematic Entomology Laboratory (SEL) in Washington, DC, confirmed that the two samples submitted were positive, and validated the results using morphological testing.

- USDA and CDFA issued press releases on March 22, 2007, announcing the confirmation of LBAM in California. APHIS. Also, APHIS issued a SPRO letter informing States and stakeholders of the LBAM in California.

- The light brown apple moth (LBAM), *Epiphyas postvittana,* is a native pest of Australia and is now widely distributed New Zealand, the United Kingdom, Ireland, and New Caledonia. Although it was reported in Hawaii in the late 1800s, the LBAM find in California is the first on the US mainland.

- If left uncontrolled, LABM could cause significant damage to some 250 plant species, including stone fruit (peaches, plums, nectarines, cherries, and apricots), pome fruit (apples and pears), grapes, and citrus.